



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/627,984

07/28/2003

Kenji Mori

26A-008

4115

23400

7590

10/18/2006

POSZ LAW GROUP, PLC
12040 SOUTH LAKES DRIVE
SUITE 101
RESTON, VA 20191

EXAMINER

ROSENBERG, LAURA B

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

1. This office action is in response to the amendment filed 29 April 2006, in which claims 10 and 11 were amended, claims 1-9, 14-25, and 31-33 were canceled, and claims 34-42 were added.

Claim Objections

2. Claim 27 is objected to because of the following informalities: "the air bag not deployed" should be changed to --the air bag *is* not deployed-- (line 4). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10, 26, 27, 41, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Saslecov (6,113,132). Saslecov et al. disclose a device (including #6, 6') for protecting an occupant seated in a rearmost seat (including #4) of a vehicle (including #1), the device comprising:

- Impact determining device (for example, acceleration sensor, not shown) able to determine that an impact has been applied to the vehicle or that there is a possibility that an impact will be applied to the vehicle (column 3, lines 49-58)

Art Unit: 3616

- Movement restricting mechanism (including airbag #6, 6'), which is able to restrict the rearward movement of the occupant seated in the rearmost seat based on the determination result of the impact determining device (column 3, lines 49-58)
- The airbag (including #6, 6') is deployed between the rearmost seat (including #4) and a rear window glass (including #7) of the vehicle and includes a "thickness restriction mechanism", or an "unfolding direction controlling mechanism", (for example, attachment elements #10) able to restrict the thickness of the airbag (for example, specific location of attachment elements will affect length, width, height, and overall shape of airbag) and able to control the unfolding direction of the airbag such that the airbag is unfolded along the rear window glass (can be seen in figures 4, 7)
- Inflator (including #8) able to supply gas to the airbag to deploy the airbag between the rearmost seat and the rear window glass
- Side rigid portions (for example, left and right sides of airbag #6) that extend in the vertical direction at the left and right sides of the airbag and are able to improve the rigidity of the airbag when the airbag is deployed (can be seen in figure 4)
- Each side rigid portion includes a vertical cell (for example, left cell and right cell as seen in figure 4), each vertical cell being inflated by gas supplied from the inflator and able to extend in the vertical direction (can be seen in figure 4)
- Airbag accommodated in an upper rear end portion of the vehicle in a folded state when the airbag is not deployed (can be seen in figures 2, 5, 6)
- Securing points (for example, including #10)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saslecov (6,113,132) as applied to claims 10, 26, 27, 41, and 42 above, and further in view of Bowers et al. (6,168,190). Saslecov does not disclose a tension applying mechanism. Bowers et al. teach a device (including #40, 100, 200) for protecting an occupant seated in a rearmost seat (including #24, 116, 216) of a vehicle (including #10, 104, 204), the device comprising:

- Movement restricting mechanism (including #34, 110, 200), which is able to restrict the rearward movement of the occupant seated in the rearmost seat, movement restricting mechanism including
 - Air bag (including #34, 110, 200) deployed between the rearmost seat and a rear window glass (including #20, 112, 202) of the vehicle (best seen in figures 3, 4, 6)
 - Tension applying mechanism (for example, including #206) that applies tension to the air bag, the tension being required for restricting the rearward movement of the occupant seated in the rearmost seat (best seen in figure 6)
- Non-inflated air bag is accommodated in an upper rear end portion of the vehicle in a folded state (for example, as seen in figures 4-6)

Art Unit: 3616

- Air bag has tension applying portions (including #206) on left and right end portions of the air bag (best seen in figures 5, 6)
- The tension applying portions are coupled to portions of the vehicle in the vicinity of both sides of the rear window glass (best seen in figures 5, 6)
- When the air bag is deployed, the tension applying portions apply a predetermined tension to the air bag (best seen in figure 6)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the movement restricting mechanism of Saslecov such that it comprised a tension applying mechanism as claimed in view of the teachings of Bowers et al. so as to better locate the airbag in a specific location along the rear window glass for optimal protection of vehicle occupants.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al. (6,168,190) in view of Dominissini (6,688,641). Bowers et al. disclose a device (including #40, 100, 200) for protecting an occupant seated in a rearmost seat (including #24, 116, 216) of a vehicle (including #10, 104, 204), the device comprising:

- Movement restricting mechanism (including #34, 110, 200), which is able to restrict the rearward movement of the occupant seated in the rearmost seat, movement restricting mechanism including:
 - Air bag (including #34, 110, 200) deployed between the rearmost seat and a rear window glass (including #20, 112, 202) of the vehicle (best seen in figures 3, 4, 6)

Art Unit: 3616

- Thickness restriction mechanism (for example, including #206) able to restrict the thickness of the airbag (best seen in figure 6)

Bowers et al. disclose the inflator being actuated in a known manner, but they do not specifically disclose an impact determining device.

Dominissini teaches a device (including #10) for protecting an occupant seated in a rearmost seat (including #16) of a vehicle (including #12), the device comprising:

- Impact determining device (including #20) able to determine that an impact has been applied to the vehicle or that there is a possibility that an impact will be applied to the vehicle (column 4, line 64-column 5, line 1)
- Movement restricting mechanism (including #18), which is able to restrict the movement of the occupant seated in the rearmost seat based on the determination result of the impact determining device (column 4, line 64-column 5, line 1)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the device for protecting a seated occupant of Bowers et al. such that it comprised an impact determining device as claimed in view of the teachings of Dominissini so as to sense an impending or presently occurring impact to determine when the occupant protection system should be deployed. Further, it is old and well known in the art to use impact determining devices, typically sensors, in this manner.

Art Unit: 3616

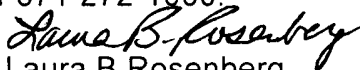
Allowable Subject Matter

8. Claims 34-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

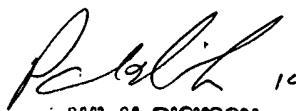
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Laura B Rosenberg
Patent Examiner
Art Unit 3616

LBR


PAUL M. DICKSON
SUPERVISOR
TECHNOLOGY CENTER 800